HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
Morton County, North Dakota

In this section, hydric soils are defined and described and the hydric soils in the survey area are listed. The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for each of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 1995). These criteria are used to identify a phase of a soil series that normally is associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (USDA, 1999) and " Keys to Soil Taxonomy"' (USDA, 1998) and in the "Soil Survey Manual" (USDA, 1993).

If soils are wet enough for a long enough period to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils in this survey area are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and others, 1996).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units in the Hydric Soil Interpretations table meet the definition of hydric soils and, in addition, have at east one of the hydric soil indicators. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 1996).

Map units that are made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

These map units, in general, do not meet the definition of hydric soils because they do not have one of the hydric soil indicators. A portion of these map units, however, may include hydric soils. Onsite investigation is recommended to determine whether hydric soils occur and the location of the included hydric soils.

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All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
1:							
TONKA SILT LOAM, 0 TO 1 PERCENT SLOPES	TONKA	Yes	depression	2B3,3	YES	NO	YES
	TONKA	Yes	depression	3,2B3	YES	NO	YES
	GRAIL	No	---	---	---	---	---
	HAMERLY	No	---	---	---	---	---
3:							
VELVA FINE SANDY LOAM, 0 TO 2 PERCENT SLOPES	VELVA	No	terrace, flood plain	---	---	---	---
	BANKS	No	---	---	---	---	---
	KORCHEA	No	---	---	---	---	---
	CHANNEL	No	---	---	---	---	---
	BREIEN	No	---	---	---	---	---
	MINNEWAUKAN	Yes	channel	2B2	YES	NO	NO
4:							
LALLIE SILTY CLAY LOAM, PONDED, 0 TO 1 PERCENT SLOPES	LALLIE	Yes	flood plain, oxbow	4,3,2B3	YES	YES	YES
	HAVRELON	No	---	---	---	---	---
	MCKEEN	Yes	depression	4,3,2B3	YES	YES	YES
5:							
DIMMICK SILTY CLAY, 0 TO 1 PERCENT SLOPES	DIMMICK	Yes	depression	2B3,3	YES	NO	YES
	DIMMICK	Yes	depression	3,2B3	YES	NO	YES
	HEIL	Yes	depression	2B3,3	YES	NO	YES
6:							
HEIL SILT LOAM, 0 TO 1 PERCENT SLOPES	HEIL	Yes	depression	2B3,3	YES	NO	YES
	HEIL	Yes	depression	3,2B3	YES	NO	YES
	BELFIELD	No	---	---	---	---	---
	DIMMICK	Yes	depression	2B3,3	YES	NO	YES
	RHOADES	No	---	---	---	---	---
	REGAN	Yes	rim	2B3	YES	NO	NO
7:							
KORELL LOAM, 0 TO 2 PERCENT SLOPES	KORELL	No	flood plain	---	---	---	---
	STRAW	No	---	---	---	---	---
	CHANNEL	No	---	---	---	---	---
	VELVA	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	HAVRELON	No	---	---	---	---	---
	MAGNUS	No	---	---	---	---	---
8:							
STRAW LOAM, 0 TO 2 PERCENT SLOPES	STRAW	No	flood plain	---	---	---	---
	KORELL	No	---	---	---	---	---
	VELVA	No	---	---	---	---	---
	CHANNEL	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	HAVRELON	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
9:							
STRAW AND VELVA SOILS, CHANNELED, 0 TO 2 PERCENT SLOPES	CHANNEL	Yes	---	4	NO	YES	NO
	STRAW	No	flood plain	---	---	---	---
	VELVA	No	flood plain, stream terrace	---	---	---	---
	KORELL	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	LALLIE	Yes	oxbow	4,2B3	YES	YES	NO
	REGAN	Yes	drainageway	2B3,4	YES	YES	NO

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
10:							
ARNEGARD LOAM, 0 TO 2 PERCENT SLOPES	ARNEGARD	No	alluvial flat, swale	---	---	---	---
	FARNUF	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	STADY	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
10B:							
ARNEGARD LOAM, 2 TO 6 PERCENT SLOPES	ARNEGARD	No	alluvial fan	---	---	---	---
	GRAIL	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	WABEK	No	---	---	---	---	---
11:							
AMOR-ARNEGARD LOAMS, 0 TO 3 PERCENT SLOPES	AMOR	No	rise	---	---	---	---
	REEDER	No	rise	---	---	---	---
	ARNEGARD	No	alluvial flat, swale	---	---	---	---
	FARNUF	No	alluvial fan	---	---	---	---
	DAGLUM	No	flat	---	---	---	---
	STADY	No	flat	---	---	---	---
	VEBAR	No	rise	---	---	---	---
	PARSHALL	No	swale	---	---	---	---
	CABBA	No	rise	---	---	---	---
11B:							
AMOR-SHAMBO LOAMS, 3 TO 6 PERCENT SLOPES	AMOR	No	rise	---	---	---	---
	SHAMBO	No	alluvial fan	---	---	---	---
	MORTON	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
12C:							
AMOR-CABBA LOAMS, 6 TO 9 PERCENT SLOPES	AMOR	No	hill, ridge	---	---	---	---
	CABBA	No	hill, ridge	---	---	---	---
	AMOR	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	COHAGEN	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
13D:							
AMOR-CABBA LOAMS, 9 TO 15 PERCENT SLOPES	AMOR	No	ridge	---	---	---	---
	CABBA	No	ridge	---	---	---	---
	AMOR	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	COHAGEN	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	DOGTOOTH	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
15B:							
CHAMA-CABBA SILT LOAMS, 3 TO 6 PERCENT SLOPES	CHAMA	No	rise	---	---	---	---
	CABBA	No	rise	---	---	---	---
	SEN	No	---	---	---	---	---
	FARLAND	No	---	---	---	---	---
	COHAGEN	No	---	---	---	---	---
	GRASSNA	No	---	---	---	---	---
	WAYDEN	No	---	---	---	---	---
15C:							
CHAMA-CABBA-SEN SILT LOAMS, 6 TO 9 PERCENT SLOPES	CHAMA	No	hill	---	---	---	---
	CABBA	No	ridge	---	---	---	---
	SEN	No	ridge	---	---	---	---
	COHAGEN	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	GOLVA	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	JANESBURG	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
15D:							
CABBA-CHAMA-SEN SILT LOAMS, 9 TO 15 PERCENT SLOPES	CABBA	No	hill, ridge	---	---	---	---
	CHAMA	No	hill, ridge	---	---	---	---
	SEN	No	hill, ridge	---	---	---	---
	VEBAR	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	JANESBURG	No	---	---	---	---	---
	GOLVA	No	---	---	---	---	---
	MASCHETAH	No	---	---	---	---	---
15F:							
CABBA-CHAMA-ARNEGARD SILT LOAMS, 15 TO 70 PERCENT SLOPES	CABBA	No	ridge	---	---	---	---
	CHAMA	No	ridge	---	---	---	---
	ARNEGARD	No	swale	---	---	---	---
	AMOR	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	ARNEGARD	No	swale	---	---	---	---
	FLASHER	No	---	---	---	---	---
	WAYDEN	No	---	---	---	---	---
	JANESBURG	No	---	---	---	---	---
16D:							
RINGLING-DAGLUM LOAMS, 6 TO 15 PERCENT SLOPES	RINGLING	No	ridge	---	---	---	---
	DAGLUM	No	ridge	---	---	---	---
	SEARING	No	---	---	---	---	---
	BRANDENBURG	No	---	---	---	---	---
	JANESBURG	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	DOGTOOTH	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
16F:							
BRANDENBURG-CABBA-SAVAGE COMPLEX, 6 TO 70 PERCENT SLOPES	BRANDENBURG	No	ridge	---	---	---	---
	CABBA	No	ridge	---	---	---	---
	SAVAGE	No	ridge	---	---	---	---
	RINGLING	No	---	---	---	---	---
	SEARING	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	DOGTOOTH	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	ROCK OUTCROP	No	---	---	---	---	---
	WAYDEN	No	---	---	---	---	---
17B:							
SEN-CHAMA SILT LOAMS, 3 TO 6 PERCENT SLOPES	SEN	No	rise	---	---	---	---
	CHAMA	No	rise	---	---	---	---
	AMOR	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	FARLAND	No	---	---	---	---	---
	GRASSNA	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
18B:							
REEDER-FARNUF LOAMS, 3 TO 6 PERCENT SLOPES	REEDER	No	rise	---	---	---	---
	FARNUF	No	rise	---	---	---	---
	AMOR	No	---	---	---	---	---
	ARNEGARD	No	alluvial flat, swale	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
19:							
FARLAND SILT LOAM, 0 TO 2 PERCENT SLOPES	FARLAND	No	alluvial flat, terrace	---	---	---	---
	FARNUF	No	---	---	---	---	---
	GOLVA	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	SEN	No	---	---	---	---	---
19B:							
FARLAND SILT LOAM, 2 TO 6 PERCENT SLOPES	FARLAND	No	alluvial fan	---	---	---	---
	FARNUF	No	---	---	---	---	---
	GRASSNA	No	---	---	---	---	---
	MORTON	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
19C:							
FARLAND SILT LOAM, 6 TO 9 PERCENT SLOPES	FARLAND	No	hill	---	---	---	---
	GOLVA	No	---	---	---	---	---
	FARLAND	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	FARNUF	No	---	---	---	---	---
	MORTON	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	FARLAND	No	---	---	---	---	---

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
19D:							
FARLAND SILT LOAM, 9 TO 15 PERCENT SLOPES	FARLAND	No	ridge	---	---	---	---
	FARNUF	No	---	---	---	---	---
	FARLAND	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	SAVAGE	No	alluvial fan	---	---	---	---
	AMOR	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
20:							
SHAMBO LOAM, 0 TO 2 PERCENT SLOPES	SHAMBO	No	alluvial flat, terrace	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	FARNUF	No	---	---	---	---	---
	STADY	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
20B:							
SHAMBO LOAM, 2 TO 6 PERCENT SLOPES	SHAMBO	No	alluvial fan	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	FARNUF	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	STADY	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
21B:							
MORTON-FARLAND SILT LOAMS, 3 TO 6 PERCENT SLOPES	MORTON	No	rise	---	---	---	---
	FARLAND	No	rise	---	---	---	---
	SEN	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	CEDARPAN	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	HEIL	Yes	depression	2B3,3	YES	NO	YES
	RINGLING	No	---	---	---	---	---
22F:							
CABBA-ROCK OUTCROP-CHAMA COMPLEX, 15 TO 70 PERCENT SLOPES	CABBA	No	butte, escarpment, hill	---	---	---	---
	ROCK OUTCROP	No	butte, escarpment, hill	---	---	---	---
	CHAMA	No	butte, escarpment, hill	---	---	---	---
	COHAGEN	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	DOGTOOTH	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	WAYDEN	No	---	---	---	---	---

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
23C:							
MORTON-CABBA SILT LOAMS, 3 TO 9 PERCENT SLOPES	MORTON	No	ridge	---	---	---	---
	MORTON	No	---	---	---	---	---
	CABBA	No	ridge	---	---	---	---
	CHAMA	No	---	---	---	---	---
	REEDER	No	---	---	---	---	---
	FARLAND	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	REGAN	Yes	flat	---	---	---	---
26:							
GRAIL SILTY CLAY LOAM, 0 TO 2 PERCENT SLOPES	GRAIL	No	alluvial flat	---	---	---	---
	GRAIL	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	LAWTHER	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	FARLAND	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
27:							
BELFIELD-GRAIL SILTY CLAY LOAMS, 0 TO 2 PERCENT SLOPES	BELFIELD	No	alluvial flat	---	---	---	---
	GRAIL	No	alluvial flat	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	FARNUF	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	LAWTHER	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	STRAW	No	---	---	---	---	---
27B:							
GRAIL-BELFIELD SILTY CLAY LOAMS, 2 TO 6 PERCENT SLOPES	BELFIELD	No	alluvial fan, terrace	---	---	---	---
	GRAIL	No	alluvial fan, terrace	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	FARNUF	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
28:							
BELFIELD-DAGLUM SILT LOAMS, 0 TO 2 PERCENT SLOPES	BELFIELD	No	alluvial flat, terrace	---	---	---	---
	DAGLUM	No	alluvial flat, terrace	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	GRAIL	No	swale, terrace	---	---	---	---
	SAVAGE	No	alluvial flat	---	---	---	---
	RHOADES	No	alluvial flat	---	---	---	---
	REGENT	No	flat, rise	---	---	---	---
28B:							
BELFIELD-DAGLUM SILT LOAMS, 2 TO 6 PERCENT SLOPES	BELFIELD	No	alluvial fan	---	---	---	---
	DAGLUM	No	alluvial fan	---	---	---	---
	FARLAND	No	---	---	---	---	---
	GRAIL	No	swale, terrace	---	---	---	---
	RHOADES	No	alluvial flat	---	---	---	---
	REEDER	No	flat, rise	---	---	---	---
	SLICKSPOTS	No	alluvial fan, alluvial flat	---	---	---	---

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HYDRIC SOILS LIST
Morton County, North Dakota

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
29:							
SAVAGE SILTY CLAY LOAM, 0 TO 2 PERCENT SLOPES	SAVAGE	No	alluvial flat	---	---	---	---
	GRAIL	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	FARNUF	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	LAWTHER	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
29B:							
SAVAGE SILTY CLAY LOAM, 2 TO 6 PERCENT SLOPES	SAVAGE	No	alluvial fan	---	---	---	---
	GRAIL	No	---	---	---	---	---
	FARLAND	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	STADY	No	---	---	---	---	---
29C:							
SAVAGE SILTY CLAY LOAM, 6 TO 9 PERCENT SLOPES	SAVAGE	No	ridge	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	FARNUF	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	FARLAND	No	---	---	---	---	---
	REEDER	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	MASCHETAH	No	---	---	---	---	---
30:							
REGENT-SAVAGE SILTY CLAY LOAMS, 0 TO 3 PERCENT SLOPES	REGENT	No	rise	---	---	---	---
	SAVAGE	No	flat	---	---	---	---
	REEDER	No	---	---	---	---	---
	GRAIL	No	alluvial flat	---	---	---	---
	MOREAU	No	---	---	---	---	---
	BELFIELD	No	alluvial flat	---	---	---	---
	JANESBURG	No	---	---	---	---	---
30B:							
REGENT-SAVAGE SILTY CLAY LOAMS, 3 TO 6 PERCENT SLOPES	REGENT	No	rise	---	---	---	---
	SAVAGE	No	rise	---	---	---	---
	MOREAU	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	WAYDEN	No	---	---	---	---	---

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
Morton County, North Dakota

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
30C:							
REGENT-SAVAGE SILTY CLAY LOAMS, 6 TO 9 PERCENT SLOPES	REGENT	No	ridge	---	---	---	---
	REEDER	No	---	---	---	---	---
	SAVAGE	No	ridge	---	---	---	---
	CABBA	No	---	---	---	---	---
	FARNUF	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	JANESBURG	No	---	---	---	---	---
31B:							
REGENT-JANESBURG COMPLEX, 0 TO 6 PERCENT SLOPES	REGENT	No	rise	---	---	---	---
	JANESBURG	No	rise	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	REEDER	No	---	---	---	---	---
	DOGTOOTH	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
31C:							
REGENT-JANESBURG COMPLEX, 6 TO 9 PERCENT SLOPES	REGENT	No	hill	---	---	---	---
	JANESBURG	No	hill	---	---	---	---
	REGENT	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	DOGTOOTH	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	WAYDEN	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
35B:							
MOREAU SILTY CLAY, 0 TO 6 PERCENT SLOPES	MOREAU	No	rise	---	---	---	---
	MOREAU	No	---	---	---	---	---
	WAYDEN	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	LAWTHER	No	---	---	---	---	---
	JANESBURG	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
35C:							
MOREAU-WAYDEN SILTY CLAYS, 6 TO 9 PERCENT SLOPES	MOREAU	No	ridge	---	---	---	---
	WAYDEN	No	ridge	---	---	---	---
	LAWTHER	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	JANESBURG	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	DOGTOOTH	No	---	---	---	---	---

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
Morton County, North Dakota

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
35D:							
MOREAU-WAYDEN SILTY CLAYS, 9 TO 15 PERCENT SLOPES	MOREAU	No	ridge	---	---	---	---
	WAYDEN	No	ridge	---	---	---	---
	REGENT	No	---	---	---	---	---
	JANESBURG	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	FARLAND	No	---	---	---	---	---
	LAWTHER	No	---	---	---	---	---
	WABEK	No	---	---	---	---	---
	REEDER	No	---	---	---	---	---
36:							
LAWTHER SILTY CLAY, 0 TO 2 PERCENT SLOPES	LAWTHER	No	alluvial flat, terrace	---	---	---	---
	SAVAGE	No	alluvial fan	---	---	---	---
	BELFIELD	No	alluvial flat	---	---	---	---
	MOREAU	No	rise	---	---	---	---
	DAGLUM	No	alluvial flat	---	---	---	---
	CABBA	No	knob	---	---	---	---
38B:							
SEARING-RINGLING LOAMS, 0 TO 6 PERCENT SLOPES	SEARING	No	rise	---	---	---	---
	RINGLING	No	rise	---	---	---	---
	FARNUF	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	BRANDENBURG	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
40C:							
RHOADES-SLICKSPOTS-DAGLUM COMPLEX, 0 TO 9 PERCENT SLOPES	RHOADES	No	alluvial flat	---	---	---	---
	SLICKSPOTS	No	alluvial fan, alluvial flat	---	---	---	---
	DAGLUM	No	alluvial fan, alluvial flat	---	---	---	---
	DOGTOOTH	No	---	---	---	---	---
	RHOADES	No	alluvial fan, alluvial flat	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	EKALAKA	No	---	---	---	---	---
	HARRIET	Yes	drainageway	2B3	YES	NO	NO
41B:							
DAGLUM-RHOADES COMPLEX, 0 TO 6 PERCENT SLOPES	DAGLUM	No	alluvial flat	---	---	---	---
	RHOADES	No	alluvial flat	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	FARLAND	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	HEIL	Yes	depression	2B3,3	YES	NO	YES

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
Morton County, North Dakota

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
41C:							
DAGLUM-RHOADES COMPLEX, BEDROCK SUBSTRATUM, 6 TO 9 PERCENT SLOPES	DAGLUM	No	ridge	---	---	---	---
	RHOADES	No	ridge	---	---	---	---
	DOGTOOTH	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	JANESBURG	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
	SLICKSPOTS	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
42F:							
DOGTOOTH-JANESBURG-CABBA COMPLEX, 6 TO 30 PERCENT SLOPES	DOGTOOTH	No	fan, hill	---	---	---	---
	JANESBURG	No	fan, hill	---	---	---	---
	CABBA	No	hill	---	---	---	---
	MOREAU	No	---	---	---	---	---
	WAYDEN	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	EKALAKA	No	---	---	---	---	---
	REGAN	Yes	drainageway	2B3	YES	NO	NO
	SLICKSPOTS	No	---	---	---	---	---
43C:							
RHOADES-DAGLUM FINE SANDY LOAMS, 0 TO 9 PERCENT SLOPES	RHOADES	No	alluvial fan, ridge	---	---	---	---
	DAGLUM	No	alluvial fan, ridge	---	---	---	---
	EKALAKA	No	---	---	---	---	---
	DESART	No	---	---	---	---	---
	DAGLUM	No	alluvial fan, ridge	---	---	---	---
	RHOADES	No	alluvial fan, ridge	---	---	---	---
	BANKS	No	---	---	---	---	---
	HARRIET	Yes	drainageway	2B3	YES	NO	NO
	SLICKSPOTS	No	---	---	---	---	---
	HEIL	Yes	---	3,2B3	YES	NO	YES
	STIRUM	No	---	---	---	---	---
44B:							
EKALAKA-LAKOTA FINE SANDY LOAMS, 0 TO 6 PERCENT SLOPES	EKALAKA	No	alluvial flat, terrace	---	---	---	---
	LAKOTA	No	fan, terrace	---	---	---	---
	DESART	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	HARRIET	Yes	drainageway	2B3	YES	NO	NO
45:							
HARRIET SILT LOAM, 0 TO 2 PERCENT SLOPES	HARRIET	Yes	flood plain	2B3	YES	NO	NO
	REGAN	Yes	drainageway	2B3	YES	NO	NO
	SLICKSPOTS	Unranked	---	---	---	---	---
	RHOADES	No	---	---	---	---	---
	HEIL	Yes	depression	3,2B3	YES	NO	YES
	DAGLUM	No	---	---	---	---	---

HYDRIC SOIL INTERPRETATIONS
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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
46C:							
LAKOTA-EKALAKA FINE SANDY LOAMS, GULLIED, 0 TO 9 PERCENT SLOPES	LAKOTA	No	fan, terrace	---	---	---	---
	EKALAKA	No	alluvial fan, terrace	---	---	---	---
	DESART	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	SLICKSPOTS	No	---	---	---	---	---
	TELFER	No	---	---	---	---	---
47B:							
DOGTOOTH-JANESBURG SILT LOAMS, 0 TO 6 PERCENT SLOPES	DOGTOOTH	No	fan	---	---	---	---
	JANESBURG	No	fan	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	SLICKSPOTS	No	---	---	---	---	---
	WAYDEN	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
48B:							
DESART-EKALAKA-TELFER COMPLEX, 0 TO 6 PERCENT SLOPES	DESART	No	alluvial fan, alluvial flat	---	---	---	---
	EKALAKA	No	alluvial fan, alluvial flat	---	---	---	---
	TELFER	No	rise	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	LAKOTA	No	---	---	---	---	---
	LIHEN	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
49B:							
LEFOR FINE SANDY LOAM, 0 TO 6 PERCENT SLOPES	LEFOR	No	rise	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	COHAGEN	No	---	---	---	---	---
	DOGTOOTH	No	---	---	---	---	---
	LIHEN	No	---	---	---	---	---
	HEIL	Yes	depression	2B3,3	YES	NO	YES
51D:							
VEBAR-FLASHER-TALLY COMPLEX, 9 TO 15 PERCENT SLOPES	VEBAR	No	hill, ridge	---	---	---	---
	FLASHER	No	hill, ridge	---	---	---	---
	TALLY	No	hill	---	---	---	---
	COHAGEN	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
	BEISIGL	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	TELFER	No	---	---	---	---	---
51F:							
FLASHER-VEBAR-PARSHALL COMPLEX, 9 TO 35 PERCENT SLOPES	FLASHER	No	ridge	---	---	---	---
	VEBAR	No	ridge	---	---	---	---
	PARSHALL	No	ridge	---	---	---	---
	BEISIGL	No	---	---	---	---	---
	TELFER	No	---	---	---	---	---
	COHAGEN	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	ROCK OUTCROP	No	---	---	---	---	---

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Morton County, North Dakota

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
52B:							
VEBAR-PARSHALL FINE SANDY LOAMS, 0 TO 6 PERCENT SLOPES	VEBAR	No	rise	---	---	---	---
	PARSHALL	No	swale	---	---	---	---
	TALLY	No	---	---	---	---	---
	BEISIGL	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	FLASHER	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	COHAGEN	No	---	---	---	---	---
53B:							
TALLY-PARSHALL FINE SANDY LOAMS, 0 TO 6 PERCENT SLOPES	TALLY	No	alluvial fan, terrace	---	---	---	---
	PARSHALL	No	alluvial fan, swale, terrace	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	LIHEN	No	---	---	---	---	---
	KREM	No	---	---	---	---	---
	EKALAKA	No	---	---	---	---	---
	LEFOR	No	---	---	---	---	---
53C:							
TALLY-PARSHALL FINE SANDY LOAMS, 6 TO 9 PERCENT SLOPES	TALLY	No	ridge	---	---	---	---
	PARSHALL	No	ridge	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
	TELFER	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
	COHAGEN	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	MANNING	No	---	---	---	---	---
54C:							
VEBAR-FLASHER COMPLEX, 6 TO 9 PERCENT SLOPES	VEBAR	No	ridge	---	---	---	---
	TALLY	No	---	---	---	---	---
	FLASHER	No	ridge	---	---	---	---
	COHAGEN	No	---	---	---	---	---
	BEISIGL	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	ZAHL	No	---	---	---	---	---
	PETA	No	alluvial flat	---	---	---	---
55B:							
BEISIGL-LIHEN LOAMY FINE SANDS, 0 TO 6 PERCENT SLOPES	BEISIGL	No	rise	---	---	---	---
	LIHEN	No	rise	---	---	---	---
	SEROCO	No	---	---	---	---	---
	FLASHER	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
56:							
PARSHALL FINE SANDY LOAM, 0 TO 2 PERCENT SLOPES	PARSHALL	No	alluvial flat, terrace	---	---	---	---
	TALLY	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	LIHEN	No	---	---	---	---	---
	MANNING	No	---	---	---	---	---
	STADY	No	---	---	---	---	---
	EKALAKA	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
57D:							
BEISIGL-FLASHER LOAMY FINE SANDS, 6 TO 15 PERCENT SLOPES	BEISIGL	No	ridge	---	---	---	---
	FLASHER	No	ridge	---	---	---	---
	TELFER	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
58B:							
LIHEN-PARSHALL COMPLEX, 0 TO 6 PERCENT SLOPES	LIHEN	No	rise	---	---	---	---
	PARSHALL	No	swale	---	---	---	---
	TELFER	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
	STADY	No	---	---	---	---	---
	LIHEN	No	---	---	---	---	---
	SEROCO	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	BEISIGL	No	---	---	---	---	---
	MANNING	No	---	---	---	---	---
59F:							
FLASHER-ROCK OUTCROP-VEBAR COMPLEX, 9 TO 70 PERCENT SLOPES	FLASHER	No	ridge	---	---	---	---
	ROCK OUTCROP	No	ridge	---	---	---	---
	VEBAR	No	ridge	---	---	---	---
	BEISIGL	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
	COHAGEN	No	---	---	---	---	---
	TELFER	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
60D:							
WABEK-MANNING COMPLEX, 6 TO 15 PERCENT SLOPES	WABEK	No	ridge, terrace	---	---	---	---
	MANNING	No	ridge, terrace	---	---	---	---
	WABEK	No	---	---	---	---	---
	WABEK	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	BOWDLE	No	---	---	---	---	---
	LEHR	No	---	---	---	---	---
	TELFER	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
62B:							
MANNING FINE SANDY LOAM, 0 TO 6 PERCENT SLOPES	MANNING	No	terrace	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	STADY	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	WABEK	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
63B:							
LEHR-STADY LOAMS, 0 TO 6 PERCENT SLOPES	LEHR	No	terrace	---	---	---	---
	STADY	No	terrace	---	---	---	---
	BOWDLE	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	MANNING	No	---	---	---	---	---
	WANAGAN	No	---	---	---	---	---
	WABEK	No	---	---	---	---	---
64:							
STADY LOAM, 0 TO 3 PERCENT SLOPES	STADY	No	terrace	---	---	---	---
	BOWDLE	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	LEHR	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	MANNING	No	---	---	---	---	---
	MARYSLAND	Yes	drainageway	2B3	YES	NO	NO
	AMOR	No	---	---	---	---	---
65:							
WANAGAN LOAM, 0 TO 3 PERCENT SLOPES	WANAGAN	No	stream terrace	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	LEHR	No	---	---	---	---	---
	STADY	No	---	---	---	---	---
66F:							
WABEK-CABBA-SHAMBO COMPLEX, 6 TO 35 PERCENT SLOPES	WABEK	No	ridge	---	---	---	---
	CABBA	No	ridge	---	---	---	---
	SHAMBO	No	ridge	---	---	---	---
	LEHR	No	---	---	---	---	---
	FLASHER	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	MANNING	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	TELFER	No	---	---	---	---	---
67B:							
VIRGELLE FINE SANDY LOAM, 0 TO 6 PERCENT SLOPES	VIRGELLE	No	stream terrace	---	---	---	---
	VIRGELLE	No	---	---	---	---	---
	LIHEN	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	KREM	No	---	---	---	---	---
	TELFER	No	---	---	---	---	---
	FARNUF	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	FLAXTON	No	---	---	---	---	---

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
Morton County, North Dakota

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
68D:							
TELFER LOAMY FINE SAND, 6 TO 15 PERCENT SLOPES	TELFER	No	ridge	---	---	---	---
	LIHEN	No	---	---	---	---	---
	BEISIGL	No	---	---	---	---	---
	SCHALLER	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
	TELFER	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
	EKALAKA	No	---	---	---	---	---
68E:							
TELFER LOAMY FINE SAND, 15 TO 25 PERCENT SLOPES	TELFER	No	ridge	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	SCHALLER	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
	LINTON	No	---	---	---	---	---
	SEROCO	No	---	---	---	---	---
	WHITEBIRD	No	---	---	---	---	---
70:							
BOWBELLS LOAM, 0 TO 3 PERCENT SLOPES	BOWBELLS	No	flat, swale	---	---	---	---
	GRAIL	No	---	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	TONKA	Yes	depression	3,2B3	YES	NO	YES
	BOWDLE	No	---	---	---	---	---
	HAMERLY	No	---	---	---	---	---
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
	REGAN	Yes	flat	2B3,3,4	YES	YES	YES
71:							
WILLIAMS-BOWBELLS LOAMS, 0 TO 3 PERCENT SLOPES	WILLIAMS	No	rise	---	---	---	---
	BOWBELLS	No	swale	---	---	---	---
	MAX	No	---	---	---	---	---
	TEMVIK	No	---	---	---	---	---
	TONKA	Yes	depression	3,2B3	YES	NO	YES
	HEIL	Yes	depression	2B3,3	YES	NO	YES
	MANNING	No	---	---	---	---	---
	REEDER	No	---	---	---	---	---
71B:							
WILLIAMS-BOWBELLS LOAMS, 3 TO 6 PERCENT SLOPES	WILLIAMS	No	rise	---	---	---	---
	BOWBELLS	No	swale	---	---	---	---
	MAX	No	---	---	---	---	---
	ZAHL	No	---	---	---	---	---
	REEDER	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	VEBAR	No	---	---	---	---	---
73B:							
WILLIAMS-REEDER LOAMS, 3 TO 6 PERCENT SLOPES	WILLIAMS	No	flat, till plain	---	---	---	---
	REEDER	No	rise	---	---	---	---
	BOWBELLS	No	---	---	---	---	---
	FARNUF	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	ZAHL	No	---	---	---	---	---
	KREM	No	---	---	---	---	---
	STADY	No	---	---	---	---	---
	TONKA	Yes	depression	3,2B3	YES	NO	YES

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
76C:							
WILLIAMS-ZAHL LOAMS, 6 TO 9 PERCENT SLOPES	WILLIAMS	No	ridge	---	---	---	---
	ZAHL	No	ridge	---	---	---	---
	BOWBELLS	No	---	---	---	---	---
	CABBA	No	hill, ridge	---	---	---	---
	AMOR	No	hill, ridge	---	---	---	---
	MAX	No	---	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	ZAHL	No	---	---	---	---	---
	NOONAN	No	---	---	---	---	---
76D:							
ZAHL-WILLIAMS LOAMS, 9 TO 15 PERCENT SLOPES	ZAHL	No	ridge	---	---	---	---
	WILLIAMS	No	ridge	---	---	---	---
	MAX	No	---	---	---	---	---
	BOWBELLS	No	---	---	---	---	---
	REEDER	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	WABEK	No	---	---	---	---	---
76F:							
ZAHL-WILLIAMS LOAMS, DISSECTED, 15 TO 45 PERCENT SLOPES	ZAHL	No	ridge	---	---	---	---
	WILLIAMS	No	ridge	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	BOWBELLS	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	RHOADES	No	---	---	---	---	---
	WABEK	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
77:							
TEMVIK-WILTON SILT LOAMS, 0 TO 3 PERCENT SLOPES	TEMVIK	No	till plain, rise	---	---	---	---
	WILTON	No	swale, till plain, flat	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	GRASSNA	No	---	---	---	---	---
77B:							
TEMVIK-WILLIAMS SILT LOAMS, 3 TO 6 PERCENT SLOPES	TEMVIK	No	flat, till plain	---	---	---	---
	WILTON	No	---	---	---	---	---
	WILLIAMS	No	rise, till plain	---	---	---	---
	MAX	No	---	---	---	---	---
	BRYANT	No	---	---	---	---	---
	ZAHL	No	---	---	---	---	---
	FLAXTON	No	---	---	---	---	---
80:							
BREIEN FINE SANDY LOAM, 0 TO 2 PERCENT SLOPES	BREIEN	No	flood plain, terrace	---	---	---	---
	VELVA	No	---	---	---	---	---
	BANKS	No	flood plain	---	---	---	---
	CHANNEL	Yes	---	4	NO	YES	NO
	BANKS	No	levee, flood plain	---	---	---	---
	BREIEN	No	---	---	---	---	---
	EKALAKA	No	alluvial flat, terrace	---	---	---	---

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
Morton County, North Dakota

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
82:							
MCKEEN LOAM, 0 TO 1 PERCENT SLOPES	MCKEEN	Yes	flood plain, oxbow	2B3,4,3	YES	YES	YES
	LALLIE	Yes	flood plain	2B3,4	YES	YES	NO
	SCORIO	No	flood plain	---	---	---	---
	SCORIO	No	flood plain	---	---	---	---
83:							
MCKEEN LOAM, PONDED, 0 TO 1 PERCENT SLOPES	MCKEEN	Yes	flood plain, oxbow	4,2B3,3	YES	YES	YES
	MCKEEN	Yes	flood plain, oxbow	3,2B3,4	YES	YES	YES
	LALLIE	Yes	flood plain	2B3,4	YES	YES	NO
85B:							
BANKS LOAMY FINE SAND, 0 TO 6 PERCENT SLOPES	BANKS	No	flat, flood plain, levee	---	---	---	---
	BANKS	No	---	---	---	---	---
	BANKS	No	---	---	---	---	---
	TREMBLES	No	---	---	---	---	---
	HAVRELON	No	---	---	---	---	---
86:							
HAVRELON FINE SANDY LOAM, 0 TO 2 PERCENT SLOPES	HAVRELON	No	flat, flood plain	---	---	---	---
	HAVRELON	No	---	---	---	---	---
	CHANNEL	Yes	---	4	NO	YES	NO
	BANKS	No	---	---	---	---	---
	TREMBLES	No	---	---	---	---	---
	BANKS	No	---	---	---	---	---
87:							
MINNEWAUKAN FINE SANDY LOAM, 0 TO 2 PERCENT SLOPES	MINNEWAUKAN	Yes	flat, flood plain, river valley	2B2	YES	NO	NO
	MINNEWAUKAN	Yes	flood plain	2B2	YES	NO	NO
	BANKS	No	---	---	---	---	---
	MCKEEN	Yes	flood plain, oxbow	4,3,2B3	YES	YES	YES
88:							
HAVRELON SILT LOAM, 0 TO 2 PERCENT SLOPES	HAVRELON	No	flat, flood plain	---	---	---	---
	HAVRELON	No	---	---	---	---	---
	CHANNEL	No	---	---	---	---	---
	BANKS	No	---	---	---	---	---
	HAVRELON	No	---	---	---	---	---
	RIDGELAWN	No	---	---	---	---	---
	TREMBLES	No	---	---	---	---	---
	LALLIE	Yes	flood plain	2B3	YES	NO	NO
91:							
LOHLER SILTY CLAY, 0 TO 2 PERCENT SLOPES	LOHLER	No	---	---	---	---	---
	LOHLER	No	---	---	---	---	---
	HAVRELON	No	---	---	---	---	---
	LALLIE	Yes	drainageway	2B3	YES	NO	NO
	RIDGELAWN	No	---	---	---	---	---
	HARRIET	Yes	flood plain	2B3	YES	NO	NO
	HEIL	Yes	depression	3,2B3	YES	NO	YES
98:							
MANDAN-LINTON SILT LOAMS, 0 TO 3 PERCENT SLOPES	MANDAN	No	flat, rise	---	---	---	---
	LINTON	No	flat, swale	---	---	---	---
	GRASSNA	No	---	---	---	---	---
	BRYANT	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	OMIO	No	---	---	---	---	---

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
98B:							
LINTON-MANDAN SILT LOAMS, 3 TO 6 PERCENT SLOPES	LINTON	No	rise	---	---	---	---
	MANDAN	No	swale	---	---	---	---
	OMIO	No	---	---	---	---	---
	GRASSNA	No	---	---	---	---	---
	BRYANT	No	---	---	---	---	---
	SUTLEY	No	---	---	---	---	---
	STADY	No	---	---	---	---	---
99F:							
BADLAND, OUTCROP-CABBA COMPLEX, 9 TO 70 PERCENT SLOPES	BADLAND, OUTCROP	No	escarpment	---	---	---	---
	CABBA	No	ridge	---	---	---	---
	DOGTOOTH	No	---	---	---	---	---
	BRANDENBURG	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	LAMBERT	No	---	---	---	---	---
	ROCK OUTCROP	No	---	---	---	---	---
100:							
PITS, GRAVEL AND SAND	PITS	No	terrace	---	---	---	---
	WABEK	No	---	---	---	---	---
	LEHR	No	---	---	---	---	---
105:							
DUMPS AND PITS, MINE	DUMPS AND PITS	No	hill, ridge	---	---	---	---
	CABBA	No	---	---	---	---	---
	FLASHER	No	---	---	---	---	---
110:							
USTORTHENTS, LOAMY, 0 TO 6 PERCENT SLOPES	USTORTHENTS	No	rise	---	---	---	---
	USTIPSAMMENTS	No	---	---	---	---	---
115:							
RIVERWASH	RIVERWASH	Yes	bar, channel, flood plain, river valley	4,2B2	YES	YES	NO
	MINNEWAUKAN	Yes	flood plain	2B2,4	YES	YES	NO
	LALLIE	Yes	oxbow	4,2B3	YES	YES	NO
	MCKEEN	Yes	depression	4,3,2B3	YES	YES	YES
154F:							
ARIKARA-SHAMBO-CABBA LOAMS, 9 TO 70 PERCENT SLOPES	ARIKARA	No	ridge	---	---	---	---
	CABBA	No	ridge	---	---	---	---
	SHAMBO	No	alluvial fan	---	---	---	---
	LAMBERT	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
	BADLAND, OUTCROP	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---

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Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
161F:							
BEISIGL-FLASHER-ARIKARA COMPLEX, 15 TO 70 PERCENT SLOPES	BEISIGL	No	escarpment, ridge	---	---	---	---
	FLASHER	No	escarpment, ridge	---	---	---	---
	ARIKARA	No	escarpment, ridge	---	---	---	---
	VEBAR	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	TELFER	No	---	---	---	---	---
	REGAN	Yes	drainageway	2B3	YES	NO	NO
185B:							
BANKS LOAMY FINE SAND, SLIGHTLY WET, 0 TO 6 PERCENT SLOPES	BANKS	No	flat, flood plain, levee, river valley	---	---	---	---
	BANKS	No	---	---	---	---	---
	BANKS	No	---	---	---	---	---
	TREMBLES	No	---	---	---	---	---
	HAVRELON	No	---	---	---	---	---
186:							
HAVRELON FINE SANDY LOAM, SLIGHTLY WET, 0 TO 2 PERCENT SLOPES	HAVRELON	No	flat, flood plain, river valley	---	---	---	---
	HAVRELON	No	---	---	---	---	---
	BANKS	No	---	---	---	---	---
	BANKS	No	---	---	---	---	---
188:							
HAVRELON SILT LOAM, SLIGHTLY WET, 0 TO 2 PERCENT SLOPES	HAVRELON	No	flat, flood plain, river valley	---	---	---	---
	HAVRELON	No	flood plain	---	---	---	---
	LALLIE	Yes	flood plain	2B3	YES	NO	NO
	LOHLER	No	flood plain	---	---	---	---
	TREMBLES	No	---	---	---	---	---
M-W:							
MISCELLANEOUS WATER	MISCELLANEOUS WATER	Yes	depression	3,2B3	YES	NO	YES
W:							
WATER	WATER	Yes	depression	3,2B3	YES	NO	YES
	DIMMICK	Yes	depression	3,2B3	YES	NO	YES

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				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria

FOOTNOTE: There may be small areas of included soils or miscellaneous areas that are significant to use and management of the soil; yet are too small to delineate on the soil map at the map's original scale. These may be designated as spot symbols and are defined in the published Soil Survey Report or the USDA-NRCS Technical Guide, Part II.
Areas mapped as water or any map unit that contains one of the following conventional symbols is considered a hydric soil map unit: marshes or swamps; wet spots; depressions; streams, lakes and ponds.

1. All Histosols except Folists, or

2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Aquisalids, Pachic subgroups, or Cumulic subgroups that are:

   a. Somewhat poorly drained with a water table equal to 0.0 foot (ft) from the surface during the growing season, or

   b. poorly drained or very poorly drained and have either:

      (1) water table equal to 0.0 ft during the growing season if textures are coarse sand, sand, or fine sand in all layers within 20 inches (in),

      or for other soils

      (2) water table at less than or equal to 0.5 ft from the surface during the growing season if permeability is equal to or greater than 6.0 in/hour (h) in all layers within 20 in, or

      (3) water table at less than or equal to 1.0 ft from the surface during the growing season if permeability is less than 6.0 in/h in any layer within 20 in, or

3. Soils that are frequently ponded for long duration or very long duration during the growing season, or

4. Soils that are frequently flooded for long duration or very long duration during the growing season.